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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,662	08/05/2003	Berthold Kessler	1739-0175P	5312
2292	7590	06/06/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			STAFIRA, MICHAEL PATRICK	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/633,662

Applicant(s)

KESSLER ET AL.

Examiner

Michael P. Stafira

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 10/128,484.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/128,484, filed on April 24, 2002.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurosawa et al. ('120) and in further view of Jurca ('312).

Claim 1

Kurosawa et al. ('120) discloses a method of selection of a given field of observation in the region of the interaction zone between laser beam (Fig. 9, Ref. 1) and work piece (Fig. 9, Ref. W), detection of radiation (Fig. 9, Ref. 7) coming from the selected field of observation with a radiation-sensitive receiver which delivers an electrical signal corresponding to the detected radiation (Col. 11, lines 10-28), filtering of the electrical signal (Fig. 10, Ref. 25) in order to be able to detect rapid and/or short, fault-related changes in intensity of the detected radiation (Col.

12, lines 3-65), and evaluation of the filtered electrical signal for the detection of faults during the laser machining operation (Col. 14, lines 20-28).

FIG. 9

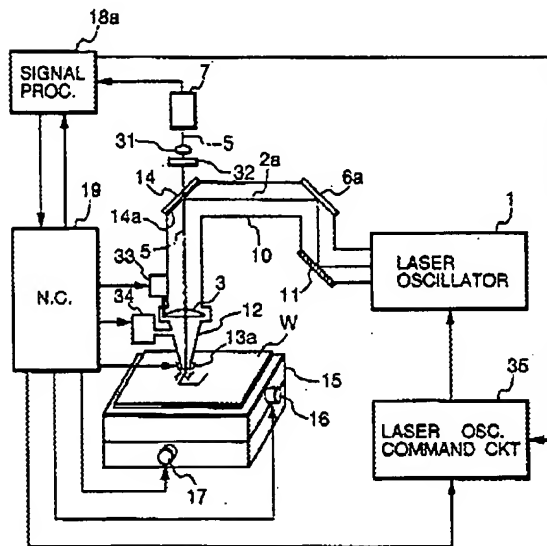
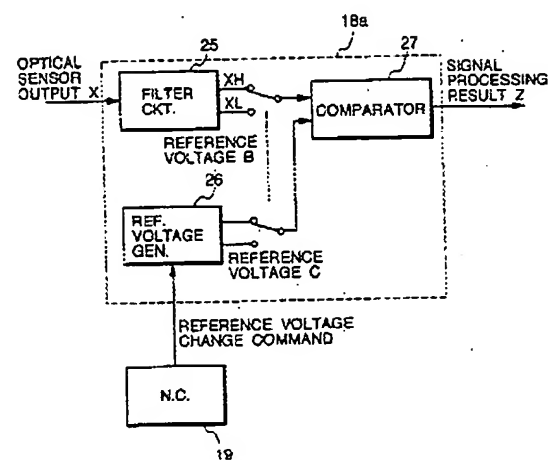
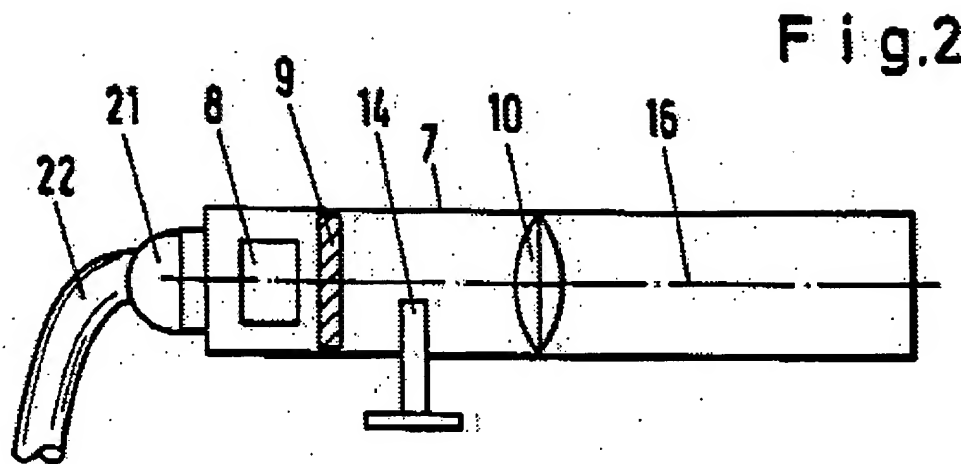


FIG. 10



Kurosawa et al. ('120) substantially teaches the claimed invention except that it does not show a method of using stop arranged in front of the radiation-sensitive receiver. Jurca ('312) shows that it is known to provide a stop (Fig. 2, Ref. 14) arranged in front of a radiation-sensitive receiver (Fig. 2, Ref. 8) for a laser welding apparatus. It would have been obvious to combine the device of Kurosawa et al. ('120) with the stop of Jurca ('312) for the purpose of providing increase in the efficiency of laser material processing when welding and cutting with laser, therefore preventing the waste of material and time necessary for quality tests after production.



Claim 3

Kurosawa et al. ('120) further discloses the spectral sensitivity of the radiation-sensitive receiver is fixed according to the selected field of observation (Col. 11, lines 22-28).

Claim 4

The reference of Kurosawa et al. ('120) further discloses the electrical signal is subjected to high-pass filtering (Col. 12, lines 3-7).

Claim 5

Kurosawa et al. ('120) discloses the filtered electrical signal is compared with stored values of a perfect machining operation in order to detect smaller faults (Col. 13, lines 30-36; Col. 14, lines 20-28).

Response to Arguments

1. Applicant's arguments filed March 15, 2005 have been fully considered but they are not persuasive.

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Applicant in the remarks takes the position on pages 5-7, that the combination of Jurca ('312) with Kurosawa et al. ('120) would not be obvious in disclosing projecting an interaction zone onto a stop arranged in front of the radiation-sensitive receiver. Examiner respectfully disagrees with the applicant's position because the reference of Jurca ('312) discloses in column 4, lines 13-17 which states that the optical axis of the detector (8) is directed to a space above the operating spot (4)("interaction zone"), with the shiftable aperture (14) ("stop") a optical signal to the detector (8) can be controlled so that the welding pool (4)("interaction zone") is projected on the detector (8). It is the examiner's position that the reference of Jurca ('312) clearly shows the aperture (14) receives the projection from the welding pool (4)("interaction zone") and gives the detector (8) a field of observation in the region of the welding pool (4)("interaction zone") and therefore, the combination of Jurca ('312) with Kurosawa et al. ('120) would have been obvious to one skilled in the art.

Applicant in the remarks takes the position on page 7, that the reference of Kurosawa et al. ('120) fails to disclose a high-pass filtering of the electrical signal. Examiner respectfully disagrees with applicant's position since in Figure 10 of Kurosawa et al. ('120) it discloses a filter circuit (25) with (XH) and (XL) filtering of the signal, therefore reading on applicant's limitation.

Conclusion

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Stafira whose telephone number is 571-272-2430. The examiner can normally be reached on 4/10 Schedule Mon.-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Toatley can be reached on 571-272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Michael P. Stafira

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Primary Examiner
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May 18, 2005